

Title (en)
ELECTRIC VEHICLE PROPULSION CONTROL DEVICE

Title (de)
ANTRIEBSSTEUERUNGSVORRICHTUNG FÜR EIN ELEKTROFAHRZEUG

Title (fr)
DISPOSITIF DE COMMANDE DE PROPULSION DE VÉHICULE ÉLECTRIQUE

Publication
EP 2738034 B1 20230927 (EN)

Application
EP 11870374 A 20110729

Priority
JP 2011067489 W 20110729

Abstract (en)
[origin: EP2738034A1] A propulsion control apparatus includes power converting units 9 and 10 capable of performing bidirectional power flow control, an ACL 11 provided on each alternating-current end side of the power converting units 9 and 10, a switching device 14 performing connection switching to connect one of a power storage device 12 and a direct-current overhead wire 2 to each direct-current end of the power converting units 9 and 10, a switching device 15 switching connection of the alternating-current end of the power converting unit 9 to either the ACL 11 or an AC motor 13 side, a switching device 16 switching connection of the alternating-current end of the power converting unit 10 to either the ACL 11 or the AC motor 13 side, a switching device 17 switching connection of the AC motor 13 to either the power converting unit 9 side or the power converting unit 10 side, and a control unit 40 controlling operations of the power converting units 9 and 10 and the switching devices 14 to 17.

IPC 8 full level

B60L 50/53 (2019.01); **B60L 1/00** (2006.01); **B60L 3/00** (2019.01); **B60L 8/00** (2006.01); **B60L 9/22** (2006.01); **B60L 15/00** (2006.01);
B60L 15/20 (2006.01); **B60L 50/30** (2019.01); **B60L 50/40** (2019.01); **B60L 50/51** (2019.01); **B60L 58/40** (2019.01)

CPC (source: EP US)

B60L 1/003 (2013.01 - EP US); **B60L 3/003** (2013.01 - EP US); **B60L 8/003** (2013.01 - EP US); **B60L 9/18** (2013.01 - US);
B60L 9/22 (2013.01 - EP US); **B60L 15/007** (2013.01 - EP US); **B60L 15/20** (2013.01 - EP US); **B60L 50/30** (2019.01 - EP US);
B60L 50/40 (2019.01 - EP US); **B60L 50/51** (2019.01 - EP US); **B60L 50/53** (2019.01 - EP US); **B60L 58/40** (2019.01 - EP US);
B60L 2200/26 (2013.01 - EP US); **B60L 2200/32** (2013.01 - EP US); **B60L 2200/36** (2013.01 - EP US); **B60L 2200/40** (2013.01 - EP US);
B60L 2210/10 (2013.01 - EP US); **B60L 2240/421** (2013.01 - EP US); **Y02T 10/64** (2013.01 - EP US); **Y02T 10/70** (2013.01 - EP US);
Y02T 10/7072 (2013.01 - EP US); **Y02T 10/72** (2013.01 - EP US); **Y02T 90/40** (2013.01 - US)

Citation (examination)

- WO 2012014324 A1 20120202 - MITSUBISHI ELECTRIC CORP [JP], et al
- WO 2012014540 A1 20120202 - MITSUBISHI ELECTRIC CORP [JP], et al

Cited by

CN104071018A; EP4100276A4; EP3556594A1; EP3269581A1; FR3053937A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2738034 A1 20140604; EP 2738034 A4 20150909; EP 2738034 B1 20230927; CN 103717437 A 20140409; CN 103717437 B 20160330;
IN 658CHN2014 A 20150403; JP 5542242 B2 20140709; JP WO2013018167 A1 20150223; KR 101508104 B1 20150408;
KR 20140040277 A 20140402; US 2014207322 A1 20140724; US 9145060 B2 20150929; WO 2013018167 A1 20130207

DOCDB simple family (application)

EP 11870374 A 20110729; CN 201180072587 A 20110729; IN 658CHN2014 A 20140127; JP 2011067489 W 20110729;
JP 2013526634 A 20110729; KR 20147004584 A 20110729; US 201114235641 A 20110729